

CLAIMS

What is claimed is:

5 1. In an initiator device having a wireless transceiver, a method for
discovering a name of a responding device comprising the steps of:

a) broadcasting a first wireless signal to be received by said responding device;

b) receiving a second wireless signal from said responding device, said second wireless signal sent in response to said first wireless signal and comprising an address for said responding device;

c) accessing a memory cache comprising names of devices; and

d) retrieving a name for said responding device from said memory cache, said name corresponding to said address.

15 2. The method as recited in Claim 1 wherein said step b) comprises the steps of:

b1) transmitting a wireless request for a name to said responding device;

b2) receiving a name for said responding device in response to said wireless request; and

20 b3) storing said name for said responding device in said memory cache, wherein said name is indexed in said memory cache using said address for said responding device.

3. The method as recited in Claim 2 comprising the step of:
removing from said memory cache an entry for one of said plurality of
responding devices when a total number of cache entries exceeds a
predetermined limit, said entry comprising a name and an address.

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4. The method as recited in Claim 3 wherein an entry is removed
from said memory cache according to an aging scheme, wherein said aging
scheme ranks entries according to frequency of use.

10 5. The method as recited in Claim 1 comprising the step of:
updating said memory cache when said name for said responding
device is changed.

15 6. The method as recited in Claim 1 comprising the step of:
displaying said name on a display of said initiator device.

7. The method as recited in Claim 1 wherein said initiator device and
said responding device are Bluetooth-enabled devices.

20 8. The method as recited in Claim 1 wherein said initiator device is a
portable computer system.

9. In an initiator device having a wireless transceiver, a method for identifying a responding device by name comprising the steps of:

- receiving a name and an address for said responding device;
- storing said name and said address in a memory cache;
- broadcasting a first wireless signal to be received by said responding device;
- receiving a second wireless signal from said responding device, said second wireless signal sent in response to said first wireless signal and comprising an address for said responding device; and
- retrieving a name for said responding device from said memory cache, said name corresponding to said address.

10. The method as recited in Claim 9 wherein said step a) comprises the steps of:

- broadcasting a third wireless signal to be received by said responding device;
- receiving an address for said responding device in response to said third wireless signal;
- transmitting a wireless request for a name to said responding device; and
- receiving a name for said responding device in response to said wireless request.

11. The method as recited in Claim 9 comprising the step of:
displaying said name on a display of said initiator device.

12. The method as recited in Claim 9 comprising the step of:
5 updating said memory cache when said name for said responding
device is changed.

13. The method as recited in Claim 9 wherein said step b) comprises
the step of:

10 b1) storing in said memory cache an entry for each of a plurality of other
responding devices, said entry comprising a name and an address.

14. The method as recited in Claim 13 wherein said step b) further
comprises the step of:

15 b2) removing from said memory cache an entry for one of said plurality
of responding devices when a total number of cache entries exceeds a
predetermined limit.

16. The method as recited in Claim 13 wherein an entry is removed
20 from said memory cache according to an aging scheme, wherein said aging
scheme ranks entries according to frequency of use.

16. The method as recited in Claim 9 wherein said initiator device and
said responding device are Bluetooth-enabled devices.

17. The method as recited in Claim 9 wherein said initiator device is a
5 portable computer system.

18. A wireless communication device comprising:
a bus;
a wireless transceiver unit coupled to said bus and for communicating
10 with responding devices;
a memory cache coupled to said bus; and
a processor coupled to said bus, said processor for performing a method
for identifying a responding device by name, said method comprising the steps
of:
15 a) broadcasting a first wireless signal to be received by said
responding device;
b) receiving an address for said responding device in response to
said first wireless signal;
c) transmitting a wireless request for a name to said responding
device;
20 d) receiving said name for said responding device in response to
said wireless request;
e) storing said address and said name in said memory cache; and

f) retrieving said name from said memory cache to subsequently identify said responding device in lieu of performing another wireless request of said step c).

5 19. The wireless communication device of Claim 18 wherein said step f) of said method comprises the steps of:

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- f1) broadcasting a second wireless signal to be received by said responding device;
- f2) receiving said address from said responding device in response to said second wireless signal; and
- f3) retrieving from said memory cache said name corresponding to said address.

10 20. The wireless communication device of Claim 18 comprising:
15 a display device for displaying said name obtained from said memory cache.

20 21. The wireless communication device of Claim 18 wherein said method comprises the step of:

g) updating said memory cache when said name for said responding device is changed.

22. The wireless communication device of Claim 18 wherein said step e) of said method comprises the step of:

e1) storing in said memory cache an entry for each of a plurality of responding devices, said entry comprising a name and an address.

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23. The wireless communication device of Claim 22 wherein said step e) of said method further comprises the step of:

e2) removing from said memory cache an entry for one of said plurality of responding devices when a total number of cache entries exceeds a predetermined limit.

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24. The wireless communication device of Claim 22 wherein an entry is removed from said memory cache according to an aging scheme, wherein said aging scheme ranks entries according to frequency of use.

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25. The wireless communication device of Claim 18 wherein said wireless communication device and said responding device are Bluetooth-enabled devices.

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26. The wireless communication device of Claim 18 wherein said wireless communication device is a portable computer system.